

## Recent Drug Abuse Trends in the Seattle-King County Area

*Caleb Banta-Green,<sup>1</sup> Ellen Silverman<sup>2</sup>, Susan Kingston<sup>3</sup>, Michael Hanrahan<sup>4</sup>, Steve Freng<sup>5</sup>, T. Ron Jackson<sup>6</sup>, Kris Nyrop<sup>7</sup>, Arnold F. Wrede<sup>2</sup>, Mark McBride<sup>8</sup>, Ann Forbes<sup>9</sup>, Joe Kabel<sup>10</sup>, Hanne Thiede<sup>11</sup>, Richard Harruff<sup>12</sup>, Greg Hewett<sup>12</sup>*

Thanks to Dave Murphy, David Solet, and Geoff Miller.

### ABSTRACT

Cocaine and heroin indicators point to a decreased, but still substantial, impact on the local population. Use of other opiates continues to increase. The overall level of use of marijuana remains high, indicator data are mixed, but are generally flat. Stimulant data are also mixed, but point to a continued rise in impact. Recent data indicate a slight decline in depressants following several years of increases. Low levels of club drug use continue, with higher levels of use among certain sub-populations. Injection drug users constitute twelve percent of newly diagnosed HIV infections in recent years. Hepatitis C may infect up to 85 percent of IDU in King County.

### INTRODUCTION

#### Area Description

Located on Puget Sound in western Washington, King County spans 2,130 square miles, of which the city of Seattle occupies 84 square miles. The combined ports of Seattle and nearby Tacoma make Puget Sound the second largest combined loading center in the United States. Seattle-Tacoma international airport, located in King County, is the largest airport in the Pacific Northwest. Interstate-5 runs through the county

---

*The authors' affiliations are as follows:*

<sup>1</sup> Alcohol and Drug Abuse Institute, University of Washington, funded by the Division of Alcohol and Substance Abuse

<sup>2</sup> Division of Alcohol and Substance Abuse, Washington State Department of Social and Health Services

<sup>3</sup> Project NEON Public Health - Seattle and King County

<sup>4</sup> HIV/AIDS Program Public Health - Seattle and King County

<sup>5</sup> Northwest High Intensity Drug Trafficking Area

<sup>6</sup> Evergreen Treatment Services

<sup>7</sup> Street Outreach Services

<sup>8</sup> United States Customs

<sup>9</sup> Washington State Alcohol and Drug Help Line

<sup>10</sup> Northwest Crime and Social Research, Inc.

<sup>11</sup> Epidemiology Research Unit, Public Health - Seattle and King County

<sup>12</sup> Medical Examiner's Office, Public Health - Seattle and King County

from Tijuana, Mexico to the south, northward to Canada (95 miles away). Interstate-90's western terminus is in Seattle, it runs east over the Cascade Mountain range, through Spokane and across Idaho and Montana.

According to the 2000 Census, the population of King County is 1,737,034, an increase of 15.2 percent since 1990. King County is the twelfth largest county in the U.S.. Of Washington's 5.9 million residents, 29 percent live in King County. The City of Seattle's population is 563,374; the suburban population of King County is growing at a faster rate than Seattle itself.

The county's population is 75.7 percent White, 10.8 percent Asian/Pacific Islander, 5.4 percent African-American, 0.5 percent Native Hawaiian and Other Pacific Islander, 2.6 'some other race', and 0.9 percent Native American or Alaska Native. Those reporting two or more races constitute 4.1 percent of the population with 5.5 percent reporting as Hispanic. Income statistics show that the 8.0 percent of adults and 12.3 percent of children live below the federal poverty level, lower than the state averages of 10.2 percent and 15.2 percent respectively.

## Data Sources

Sources of information for this paper are as follows:

- Arrestee Drug Abuse Monitoring (ADAM) Program. As part of the National Institute of Justice's ADAM program, King County's urinalysis results for January through September 2001 are included in the narratives for cocaine, heroin, marijuana, stimulants (methamphetamine) and club drugs (PCP). Data are for male arrestees only.
- Drug Abuse Warning Network (DAWN) Emergency Department (ED) Data. DAWN estimated rates per 100,000 population for ED mentions for selected drugs from 1988 through June 2001 were accessed from the Substance Abuse and Mental Health Services Administration (SAMHSA). Drug 'mentions' indicate that the patient identified the substance as something they had recently taken, it may or may not have been the reason for the ED visit. Available data are for King and Snohomish counties combined.
- Washington State Department of Social and Health Services' Treatment and Assessment Report Generation Tool (TARGET). TARGET is the department's statewide alcohol/drug treatment activity database system and report-generating software. Data are compiled for King County from January 1, 1999, through December 31, 2001. Data for all substance abuse related treatment admissions are included, this contrasts with previous CEWG reports where admissions for alcohol-only were excluded. Only the primary drug at time of treatment admission is available.
- Drug Enforcement Administration (DEA). Heroin price and purity data for the United States and Seattle come from the DEA's Domestic Monitor Program, data presented are from the first half of 2001.
- King County Medical Examiner (ME) Database. Automated information about drug-caused deaths in King County are presented by calendar quarter from January 1, 1998, through December 31, 2001. The data include deaths directly caused by licit or illicit drug overdose and exclude deaths caused by poisons. Therefore, totals may differ slightly from drug death reports published by the King County ME's office, which include fatal poisonings. Testing is not done for marijuana. Note that more than one drug may be identified per individual drug overdose death, as a result the total number of drugs identified exceeds the number of actual deaths.
- United States Customs Service. Data relating to the seizures for all illegal drugs are for July 1, 2001, to December 31, 2001. The majority of customs seizures are at the Blaine, Washington border crossing, where Interstate 5 crosses the northern border of the state and into Canada near Vancouver. This is the third busiest Canadian border crossing for passengers and fourth for commercial traffic nationally.
- Epidemiology Research Unit. Two longitudinal cohort studies of Seattle area drug injectors funded by the National Institute on Drug Abuse (NIDA) are conducted by Public Health - Seattle & King County (PHSKC). The studies began in 1994 and continue through 2002.
- "HIV/AIDS Epidemiology Report." Data on acquired immunodeficiency syndrome (AIDS) cases (including exposure related to injection drug use) in Seattle-King County, other Washington counties, Washington State (January 1999 through December 2001), and the United States (July 1998 through June 2001), are from PHSKC, Washington State Department of Health, and the Federal Centers for Disease Control and Prevention (CDC). HIV cases were reported to Public Health - Seattle & King County or the Washington Department of Health between September 1999 and December 2001. Because HIV infection reporting was first implemented in Washington in September 1999, many cases reported during this period were actually diagnosed years before.
- Key Informant Interviews. Discussions with a variety of drug users and other key informants from treatment centers and street outreach workers provided data for this paper.
- Northwest High Intensity Drug Trafficking Area (NW HIDTA). Pursuant to its designation by the Office of National Drug Control Policy, the NW HIDTA produces a Threat Assessment for the region on an annual basis. Data for 1998 through 2001 are from all Federal, State, and local law enforcement agencies and narcotics task forces in the region, and the Western States Information System (WSIN).
- Washington State Department of Ecology (DOE). The DOE provides information about environmental and response costs of methamphetamine labs and increases in incidents by county since 1990, and is responsible for handling and disposing of hazardous substances found at illegal drug labs and dump sites.
- Washington State Alcohol/Drug Help Line (ADHL). ADHL provides confidential 24-hour telephone-based treatment referral and assistance for Washington State. Data are presented for the second half of 2001 for calls originating within King County. Data presented are for drugs mentioned, a caller may refer to multiple drugs, therefore there are more mentions than there are calls. The data exclude information on alcohol and nicotine, which account for 55 percent of the 12,947 calls received during all of 2001 (35 percent of teen calls).

## DRUG ABUSE PATTERNS AND TRENDS

### *Cocaine and Crack*

Short-term indicators of cocaine use and abuse point have declined. The rate of 70 emergency department (ED) mentions for cocaine per 100,000 population in the first half of 2001 shows a decline from the high levels seen in 2000, with 88 mentions in the second half of 2000 (Exhibit 1). In the first half of 2001, 61 percent of ED mentions were male. Of those whose race/ethnicity was known, 56 percent were White, 34 percent were Black, and 5 percent were Hispanic, consistent with previous years (the race/ethnicity of 9 percent was unknown). The majority ranged in age from 26 to 44.

Admissions to drug treatment for adults reporting cocaine as their primary drug declined during 2001 from 649 to 501 in the second half of the year (Exhibit 2). While the proportion of admissions related to cocaine has remained fairly stable at approximately 13 percent for the last three years, admissions for 2001 represented a decline in numbers of 18 percent from 2000 (n= 1,398).

Route of administration of cocaine is included in treatment admissions data. For the second half of 2001, smoking was the most common method of using cocaine (55 percent), followed by injection (23 percent) and intranasal use (17 percent). Data are consistent for the last three years.

There were 20 cocaine-involved drug deaths in the second half of 2001 (Exhibit 3), accounting for 30 percent of all drug-related deaths. This is a decline from the first half of 2001 (n=29), when cocaine was involved in 33.7 percent of all drug-related deaths and 2000, when cocaine was involved in 40.6 percent of all drug-related deaths. Four of the deaths (20 percent) in the second half of 2001 involved cocaine alone; in 2000, cocaine alone was found in 31 (34.8 percent) individuals whose death was cocaine-related. Twelve of the cocaine related deaths involved opiates in combination (60 percent), and three of these were also determined to have alcohol as a contributing cause of death. In the second half of 2001, males accounted for 85 percent of the cocaine-related deaths. This is an increase from the first half of 2001, where males accounted for 76 percent of the cocaine-related deaths and 2000 when they accounted for 83 percent of deaths. Caucasians represented 75 percent of the 20 cocaine-related deaths in the second half of 2001. Of the decedents, three (15 percent) were African American. Both the number and proportion of African American deaths have declined: in 1999 17 deaths represented 23 percent of cocaine related deaths, in 2000 there were again 17 deaths representing 19 percent and in 2001 there were 4 deaths representing 8 percent of all cocaine deaths. Decedents ranged in age from 11 to 48 years, with a median age of 36.5, this is the lowest median age in the last three years.

ADAM data are available for the first three quarters and only for males. In 2001, 30.7 percent of male arrestees tested positive for cocaine in the first three quarters of 2001, this average is unchanged from 2000.

Crack cocaine sells for \$100 per gram of 40-85 percent pure product. The unit of sale is generally \$2, \$5 or \$10 'rocks'. Homeless and street drug users are the primary consumers of crack. Powder cocaine prices range from \$500 to \$1,000 per ounce for 57 to 68 percent pure product. Informants report that flake/powder cocaine sells for between \$35 and \$50 per gram (the lower price if purchased by the gram, the higher price for smaller amounts).

In the second half of 2001, the U.S. Customs Service reported 16 cocaine seizures totaling 153 pounds; in the first half of 2001, there were 18 cocaine seizures weighing a total of 223 pounds (1016 kilograms); one other seizure weighed 5,154 pounds (2,338 kilograms). In terms of weight, this is a significant increase over 2000, when 31 seizures totaled 149 pounds (68 kilograms).

In 2001, cocaine was the second most frequently cited illicit drug among those calling the Alcohol/Drug Help Line. The 1,179 calls represented 20.3 percent of all drug-related calls made to the helpline. Teens called about cocaine less often than adults, with only 8 percent of teen calls referring to cocaine.

### ***Heroin***

Heroin trends for July to December 2001 are similar to those for the first half of the year. A sustained decline in heroin related mortality is evident and contrasts markedly with the high number of heroin deaths in 1998 when 143 heroin related deaths occurred in King County compared with 61 for all of 2001 (Exhibit 3). Rates have similarly declined from a high of 8.8 per 100,000 in 1998 to 3.5 in 2001 (Exhibit 4). Among the 27 deaths during the second half of the year 81 percent were Caucasian, similar to the proportion of all drug related deaths. Seven of these deaths were for heroin alone. The number and proportion of heroin only deaths has declined from 1999 to 2001 with 49 deaths due to heroin alone in 1999, representing 42 percent of heroin related deaths, 41 deaths (41 percent) in 2000, and 16 deaths (26 percent) in 2001.

DAWN ED mentions for heroin were lower for the first half of 2001 compared with all of the six month reporting periods back through July of 1996 (Exhibit 1). The estimated rate of heroin related mentions per 100,000 persons was 38 in the first half of 2001 compared with 72 and 61 for the first halves of 2000 and 1999 respectively. Alcohol in combination with other drugs and cocaine are the two most commonly cited drugs in the ED, followed by heroin.

The majority of those visiting the ED for heroin reported using no other drugs recently. In 2000, 62 percent of ED visits for heroin were for heroin used by itself, the lowest proportion was 57 percent in 1994, with a consistent 66 percent for the intervening years.

The rate of heroin ED mentions per 100,000 population was 45 for men and 30 for women for the period between January and June 2001 compared with 91 for men and 52 for women for the first half of 2000. For the period of January to June 2001, rates of heroin mentions varied by age with a rate of 78 per 100,000 for 26-34 year olds, followed by a rate of 74 for 35-44 year olds, a rate of 63 for those aged 45-54, a rate of 35 for 18-25 year olds, a rate of 5 for those older than 55, and a rate of 2 for those under 18.

The primary form of heroin on the streets is Mexican black tar. China White, which is common in Vancouver B.C. and on the East coast, is non-existent in the local area according to the regional HIDTA and DEA.

New treatment admissions remained at a lower level for the second half of 2001 with 606 admissions (14.4 percent of all treatment admissions) similar to the 636 admissions (13.4 percent) in the first half of the year (Exhibit 2). This contrasts with 2000 when there were a total of 1,961 admissions (18.7 percent) for the entire year and 1999 when there were 1,688 admissions (17.4 percent). Funding for treatment in King County increased from 1999 to 2000 and remained stable into 2001. The decrease in treatment admissions in 2001 may be related to long treatment stays resulting in a lack of open treatment slots.

Injection remains the primary route of administration for those being admitted to treatment (96 percent).

ADAM data for the first three quarters of 2001 showed that 10 percent of arrestees tested positive for heroin. This is unchanged from the prior year.

Calls to the Alcohol/Drug Help Line for heroin represent 9.5 percent of all drug related calls. The proportion of heroin related calls was consistent from the first to the second half of the year. Teens were less likely to call about heroin, only 1.9 percent (n=22) of calls by teens were related to heroin for the entire year.

Seizure of heroin by customs officials is infrequent and the total volume small compared to the level of use, with 5 seizures totaling 5 pounds in the second half of 2001. There were seven seizures totaling 1.75 pounds during the first half of the year. The major trafficking route is believed to involve the interstate highway system from the Southern U.S. once the product has crossed the Mexican border. There is not believed to be much heroin trafficking across the Washington-Canadian border.

According to the DEA's Domestic Monitoring Program (DMP), the average price per milligram pure was \$2.69 during the first half of 2001 compared with \$1.15 for 2000. The general pattern in the Western U.S., where virtually all heroin is Mexican in origin, is that the closer to the Mexican border the cheaper and the more pure the heroin. The average purity of 14 samples collected by the DEA's Domestic Monitoring Program in Seattle was 10.3 percent during January to June of 2001; this is similar to the 12.7 percent purity for the 23 samples collected during all of 2000. This relative consistency in purity is supported by anecdotal information from HIDTA, though there are occasional reports of high quality heroin at local needle exchanges. Consistent purity may be one of the reasons that heroin related mortality has declined. Of the samples tested, 11 were identified as Mexican, the origins of two samples were unidentifiable and one sample was insufficient to test. Local informants noted that the DMP reported prices appear higher and the purity lower than what they are seeing.

Seattle DEA reported a gram of black tar heroin selling for \$50-\$100 with 0.10 of a gram selling for \$20-\$50. Local informants report that heroin is selling for \$20 for a fifth of a gram in the Downtown core. In the Capitol Hill neighborhood, a densely populated neighborhood adjacent to downtown, a gram sells for \$50. Buying larger quantities has become less expensive over the last several years. In 1998 an '8 ball' (equivalent to an eighth of an ounce or approximately 3.5 grams) sold for \$175, whereas is now sells for between \$100 and \$125.

### ***Other Opiates/Narcotics***

For the purposes of this report other opiates/narcotics include: codeine, dihydrocodeine, fentanyl, hydrocodone, methadone, oxycodone, and propoxyphene.

Deaths involving other opiates are at their highest level in at least the past 9 years, with a total of 55 mentions of other opiates associated with 49 deaths (Exhibit 3). There are more mentions than deaths because some individuals had multiple other opiates detected at the time of death. Of these 49 deaths, 41 had more than one drug detected, with the number of all types of drugs identified averaging 2.7 for other opiate users during all of 2001. The number of other opiate related deaths have tended to fluctuate much more than heroin and cocaine related deaths. Oxycodone and methadone were the two most commonly identified drugs in deaths over the last three years, constituting 75 percent of other opiates identified. Oxycodone mentions have increased from 4 in 1999 to 18 in 2001. There were 12 methadone-involved deaths from July to December of 2001, the same as the first half of the year; the number of such deaths as remained fairly stable over the last three years. There were three methadone-only deaths, efforts are underway to learn more about these deaths, including whether they were in methadone treatment prior to their death. Informants report that most methadone sold on the street is in tablet form, at a cost of fifty cents per milligram.

The latest data for Emergency Department mentions for other opiates are for the year 2000. Overall, for those substances that are specified, there was a gradual decline in DAWN ED mentions for propoxyphene ('Darvocet') and codeine and recent increases in methadone, oxycodone (e.g. 'Oxycontin' and 'Percodan') and hydrocodone (e.g. in combination with acetaminophen 'Vicodin' and 'Percoset'). The data showed a decline in the rate of mentions for codeine from a high of 10 per 100,000, to a new more stable rate of 2.5 per 100,000 per year from 1998 to 2000. Hydrocodone levels were steady around a rate of 5 to 7 mentions per 100,000 from 1994 to 1999 and increased to 10 in 2000. Methadone mentions have fluctuated from 5 to 7 mentions per 100,000 from 1994 to 1998, in 1999 the rate was 9 mentions and increased to 16 in 2000.

The majority (75 percent) of those who mentioned methadone also identified other substances. Dating back to 1994, Oxycodone mentions ranged from 4 to 5, increasing to a rate of 8 mentions per 100,000 in 2000. Proxipofene mentions per 100,000 people declined from 3 in 1994 to 1 in 2000. (Data note- DAWN includes what is considered for this report to be 'other opiates' as well as other substances within their 'narcotic analgesic' category; however, the 'narcotic analgesic *not otherwise specified*' sub-category includes well over half of the mentions, limiting the accuracy of this data.)

The Help Line reported 100 calls related to methadone for all of 2001 representing less than two percent of calls. The proportion of calls was the same in both halves of the year. Only six teens mentioned methadone in their conversations with Help Line staff, all of these mentions were during the first half of the year.

Treatment data point to low levels of treatment demand for other opiates with such admissions representing approximately one percent of all treatment admissions according to reports on the primary drug of admission (Exhibit 2). There was an increase from 41 to 54 clients admitted to treatment during the first and second halves of 2001. This is slightly higher than the last two years with 76 admissions in 2000 and 83 in 1999.

According to local DEA, hydrocodone is the most commonly diverted narcotic. This is due in large part to its status as a Schedule III drug under the Controlled Substances Act, as opposed to oxycodone which is more tightly restricted as a Schedule II narcotic; note that hydrocodone in its pure form is Schedule II, but in combination with other medications, for example when combined with acetaminophen (e.g. 'Vicodin'), it is Schedule III.

### ***Marijuana***

Marijuana continues to be one of the most widely used illicit substances. ADAM data show that 34.4 percent of arrestees tested positive for marijuana from January to September of 2001, this is a slight decline from the 37.7 percent during 2000. It is the drug most commonly identified among arrestees in King County.

DAWN ED data indicate that marijuana remains the fifth most common substance mentioned (Exhibit 1). Approximately three quarters of those who mention marijuana were also using other drugs at the time of the ED visit, this ratio has remained relatively constant over the last seven years. A surge in the rate of marijuana mentions that has been evident since the first half of 2000 has been maintained through the first half of 2001, when a rate of 36 per 100,000 was reported.

The demographics of marijuana users presenting in emergency departments have shifted, females constituted 38 percent of mentions in 2000 compared with 21 percent in 1994. Young adults are the most likely to mention marijuana use with approximately a third of marijuana mentions among those aged 18-25 over the last several years. Teenagers comprise between 12 and 17 percent of ED mentions with fluctuations year to year. Those aged 26-34 consistently comprise approximately a quarter of marijuana mentions. About 20 percent of those aged 35-44 reported marijuana use, ED mentions among older adults decrease dramatically with increasing age.

Treatment admissions for marijuana dropped in the second half of the year compared with the first half from 986 (20.8 percent) to 819 (19.5 percent). Overall marijuana is the second most common reason for drug treatment at 20 percent for 2001, with alcohol representing 41 percent of admissions. For those under age 18, marijuana is the most common drug used, with 68 percent reporting it as their primary drug. Over the last three years the number and proportion of admissions for marijuana treatment have increased slightly (Exhibit 2).

Marijuana was the drug most commonly cited among those who called the Alcohol/Drug Help Line, representing a quarter of calls. A substantial difference between adults and teens is evident, with more than twice as many teens (49 percent) as adults (21 percent) calling about marijuana. Although the total number of calls to the helpline, including for marijuana, declined in the second half of the year, percentage wise there was an increase from 23.6 to 27.3.

HIDTA data collected from local, state and federal law enforcement show the following prices for various forms and sources of marijuana: one pound of Mexican \$500-\$700, one pound of domestic \$2,400-\$3,200; one pound of 'BC Bud' from British Columbia, Canada \$2,800-\$3,000 and 100 starter plants \$1,500 (according to local police). Cultivation seizures reported to HIDTA for Washington State totaled 317 in 2000 and 401 in 2001, in King County there were 24 seizures in 2000 and 12 in 2001.

Customs reports a large increase in seizures of marijuana, principally at the U.S.-Canadian border crossing at Blaine, where Interstate 5 crosses into Canada near Vancouver. Comparing the first half of 2001 with the second half there was a slight increase in the number of marijuana seizures from 268 to 301 and more than a doubling in the number of pounds of marijuana seized from 3,342 to 7,519 pounds. There was a noticeable drop in marijuana seizures following the terrorist attacks on September 11, 2001 followed by a surge in seizures between September 22nd and October 15<sup>th</sup> when 2,300 pounds were seized. A similar amount was seized in one day, December 22<sup>nd</sup>, all from commercial trucks.

### *Stimulants*

DAWN ED mentions for amphetamine and methamphetamine in Seattle-King County decreased during the period from January through June, 2001, reversing the upward trend that was first noted in 1999 and that continued through 2000 (Exhibit 1). The reported rate for the first half of 2001 was 21 per 100,000, representing a 43 percent decrease from the same period in 2000 when it was 30 per 100,000. Overall, amphetamine and methamphetamine combined continued to rank fifth in ED mentions behind cocaine, alcohol in combination, heroin and marijuana; this ranking has now been maintained for the past five years.

The number of King County treatment admissions for persons reporting amphetamine and methamphetamine as their primary substance remained relatively stable during 2001 (Exhibit 2). Admissions during 2001 accounted for 9.5 percent of the total King County treatment admissions for the period, continuing to be surpassed by those for persons reporting alcohol, cocaine, heroin and marijuana as their primary substance. This is an increase from 2000 when methamphetamine admissions made up 7.6 percent of all admissions, and 1999 when they constituted 5.6 percent.

The total number of calls to the Alcohol/Drug Help Line that originated in King County regarding amphetamine and methamphetamine increased during 2001, numbering 1,040 (18 percent of drug related calls). Stimulants were the second most commonly cited drug by teenagers (17 percent). Calls by those concerned about their own use represented 15.5 percent of all calls about personal use, ranking third. Calls by those concerned about another person's stimulant use made up 21.2 percent of such calls, ranking second.

The percentage of male arrestees in Seattle-King County (ADAM) testing positive for methamphetamine in the first three quarters of 2001 was 11.0 percent (n=63), compared to a rate of 9.2 percent for all of 2000. The gradually increasing proportion was first noted in 1999 (9.0 percent).

A total of five drug-related deaths involving amphetamine and methamphetamine were recorded in King County during 2001 representing a decrease from preceding years (14 such deaths in 1999 and 11 in 2000) (Exhibit 3). Each death in 2001 was considered to be accidental and four of the five deaths involved substances in combination with methamphetamine. Two of the decedents were female Caucasians two

were male Caucasians, and one was a male Asian, with ages ranging from 27 to 50 and an average age of 36.

Local prices in Seattle-King County and throughout the State of Washington have remained stable despite increasing availability, ranging from \$20 - \$60 per gram, \$350 - \$650 per ounce and \$4,250 - \$6,000 per pound in Seattle-King County.

Smoking remains the most prevalent route of administration, reported by 45 percent of persons admitted for treatment during the second half of 2001, with 22 percent using it intra-nasally and 22 percent injecting the drug (Exhibit 2). From 1999 to 2001, the proportion of those smoking has increased, from 31 percent to 42 percent, while the proportion injecting has decreased from 30 percent to 23 percent.

It is estimated that 65-75 percent of the methamphetamine in Washington State is transported from Oregon, California and Mexico. The U.S. Customs Service reports the seizure of 2.66 pounds of methamphetamine during 2001 at five land route, maritime and commercial air ports of entry. However, ease of access to precursors, the availability of equipment, recipes and manufacturing locations, and the purity of methamphetamine produced by local clandestine labs contribute to their continuing proliferation. Nearly half (47.5 percent) of the labs seized 2001 were of the "Nazi" type, 32 percent of which were located in single family housing and 21 percent of which were located in vehicles. The red phosphorus method accounted for 28.4 percent of the lab types, with the ephedrine extraction, hydriodic acid and other methods comprising the balance of the lab types. The NW HIDTA reported that a total of 114 kilograms of methamphetamine were seized from lab locations in 2001.

Documented lab seizures throughout Washington State numbered 939 in 2001 (ranking the state third in the nation), surpassing the total of 831 seized throughout 2000, which in turn entailed a 60 percent increase from 1999. Overall, from 1996 to 2001 the number of labs seized increased four fold across the state, with a five fold increase in King County. In 2000 there were 120 busts in King County, local law enforcement believes the decrease to 90 in 2001 (also seen in Pierce County, which has the largest number of sites in the state) is due to manufacturers moving into more rural areas.

An additional 552 places statewide were identified by the Department of Ecology as dump sites, bringing the total number of locations associated with the manufacture of methamphetamine to 1,460. The documented lab seizures in King County numbered 82 in 2001 (9 percent of the statewide total). In addition, 74 places were identified as dump sites, for an overall total of 156 locations associated with the manufacture of methamphetamine identified in 2001.

### ***Depressants***

Barbiturates, benzodiazepines, and other sedative/depressant drugs in this analysis include alprazolam (Xanax), butalbital (Fioricet), chlordiazepoxide (Librium), cyclobenzaprine (Flexeril), diazepam (Valium), hydroxyzine pamoate (Vistaril), lorazepam (Ativan), meprobamate (Equanil), oxazepam (Serax), phenobarbital, promethazine (Phenergan), secobarbital (Seconal), temazepam (Restoril), triazolam (Halcion), and zolpidem (Ambien).

Depressant mentions in medical examiner show half as many related deaths (n=16) in the second half of the year as in the first (n=32) (Exhibit 3). This compares with annual totals of 37 and 30 in the two preceding years. The actual number of deaths associated with depressants was 35, 29, and 25 for 2001, 2000 and 1999 respectively. On average over the last three years, twenty two percent of depressant related deaths had two or more depressants identified. The most common other types of drugs identified among depressant related deaths were heroin/morphine, which were identified in 29 percent of deaths and other opiates identified in 47 percent of deaths during 1999-2001.

DAWN ED data for 'anxiolytics, sedatives and hypnotics' have fluctuated over the last seven years but has shown an increase during the period from January 2000 to June 2001 when there were approximately 800 mentions per six month period. For the eighteen months prior, mentions were about a third lower. For the most recent six month reporting period the estimated number of mentions for depressants (840 mentions which is equivalent to a rate of 37 mentions per 100,000) was similar to those for marijuana (830 mentions). Benzodiazepines are the most commonly mentioned depressant, representing about three quarters of mentions.

The Help Line reported data on adult calls related to benzodiazepines, barbiturates and tranquilizers, which combined represented less than one percent of drugs mentioned by callers.

Treatment data point to limited admissions for tranquilizers. There were 37 admissions in 2001, 12 in 2000 and 24 in 1999, never making up more than 0.5 percent.

### ***Hallucinogens and Club Drugs***

Hallucinogens include lysergic acid diethylamide (LSD), mescaline, peyote, psilocybin (mushrooms), and phencyclidine (PCP). "Club drugs" is a general term used for drugs that are popular at nightclubs and raves, including the hallucinogens, MDMA (Ecstasy), GHB, GBL, ketamine, and nitrous oxide.

MDMA ED mentions during the first half of 2001 (n=62) decreased by 14 percent from the previous six-month peak. The rate for MDMA was 6 per 100,000 people for 2000 and 2 per 100,000 in 1999. The estimates for the number of people mentioning GHB (n=25) and PCP (n=45) also decreased in the same period by 14 percent and 18 percent respectively. However, MDMA, GHB, and PCP combined constitute less than one percent of total ED mentions. LSD ED mentions per 100,000 population have stabilized at the lowest twelve-month rate since 1996, and for the first time since 1998 there were no ED mentions of ketamine. The combined rate for MDMA, LSD, miscellaneous hallucinogens, GHB, ketamine, and rohypnol was 7 per 100,000 for the half year period from January to June of 2001 (Exhibit 1).

The King County Medical Examiner reports no deaths during the second half of 2001 involving ketamine, GHB, PCP, or LSD (Exhibit 3). There was one death from MDMA in isolation, a 15 year old female. These statistics mirror those reported for the first half of 2001, when there was one death with only MDMA present. From 1999 to 2001 there were a total of five MDMA related deaths, all were Caucasian, between the ages of 15 and 28, three had only MDMA present, one also had methamphetamine, the other also had cocaine detected.

ADAM data for drugs in this category are limited to PCP. During the first three quarters of 2001, only 1.3 percent of adult male arrestees (n=7) tested positive for PCP, the same proportion as the prior year.

TARGET data point to low treatment admissions with 12 admissions for hallucinogens and PCP in the last half of 2001, roughly average for the last three years. Anecdotal reports from treatment agencies indicate no significant change in youth or adult admission rates. Calls to the local ADHL concerning these substances (n=126) have remained relatively low during the last half of 2001, with hallucinogens and club drugs constituting 5.6 percent of all drug-related calls and 12.9 percent of teen calls.

Other information concerning patterns of use remains exclusively anecdotal. According to both adult and youth users, prices for Ecstasy, GHB, PCP and ketamine have remained stable over the last year (e.g. a 150-250 mg tablet of MDMA selling for \$20-\$30). Quality and consistency of MDMA, however, remains unpredictable. GHB use among gay men in bathhouses, bars, and sex clubs is reportedly increasing, particularly among men under the age of 30.

***HIV, AIDS and Hepatitis among Injection Drug Users***

There are an estimated 12,000-15,000 drug injectors who live in Seattle and King County. Based on back calculation from year of AIDS diagnosis and average length of time between HIV infection and diagnosis of AIDS, Public Health – Seattle & King County estimates that HIV entered the drug injecting population in King County in the early to mid-1980s. Like other metropolitan areas in the western US, the number of cases of HIV/AIDS among drug injectors is far less than among gay and bisexual men (Exhibits 5 and 6). As a proportion of total HIV cases diagnosed and reported, those attributable to injection drug use among persons who are not males with same sex partners have increased from 3 percent of diagnoses in 1982-1986 to 8 percent in 1999-2001. This increase in proportion does not appear to translate into an actual increase in the rate of infection among injection drug users (IDU) but is due, rather, to a relative decline in the number of cases diagnosed among non-injecting men who have sex with men (MSM). While there are distinct differences among races, overall prevalence of HIV among non-MSM IDU in King County appears to have remained low and stable over the past 14 years. Various sero-surveys conducted in drug treatment centers, correctional facilities, and through street and community-targeted sampling strategies over this period yield an HIV prevalence estimate of 1-2 percent in King County's non-MSM IDU population.

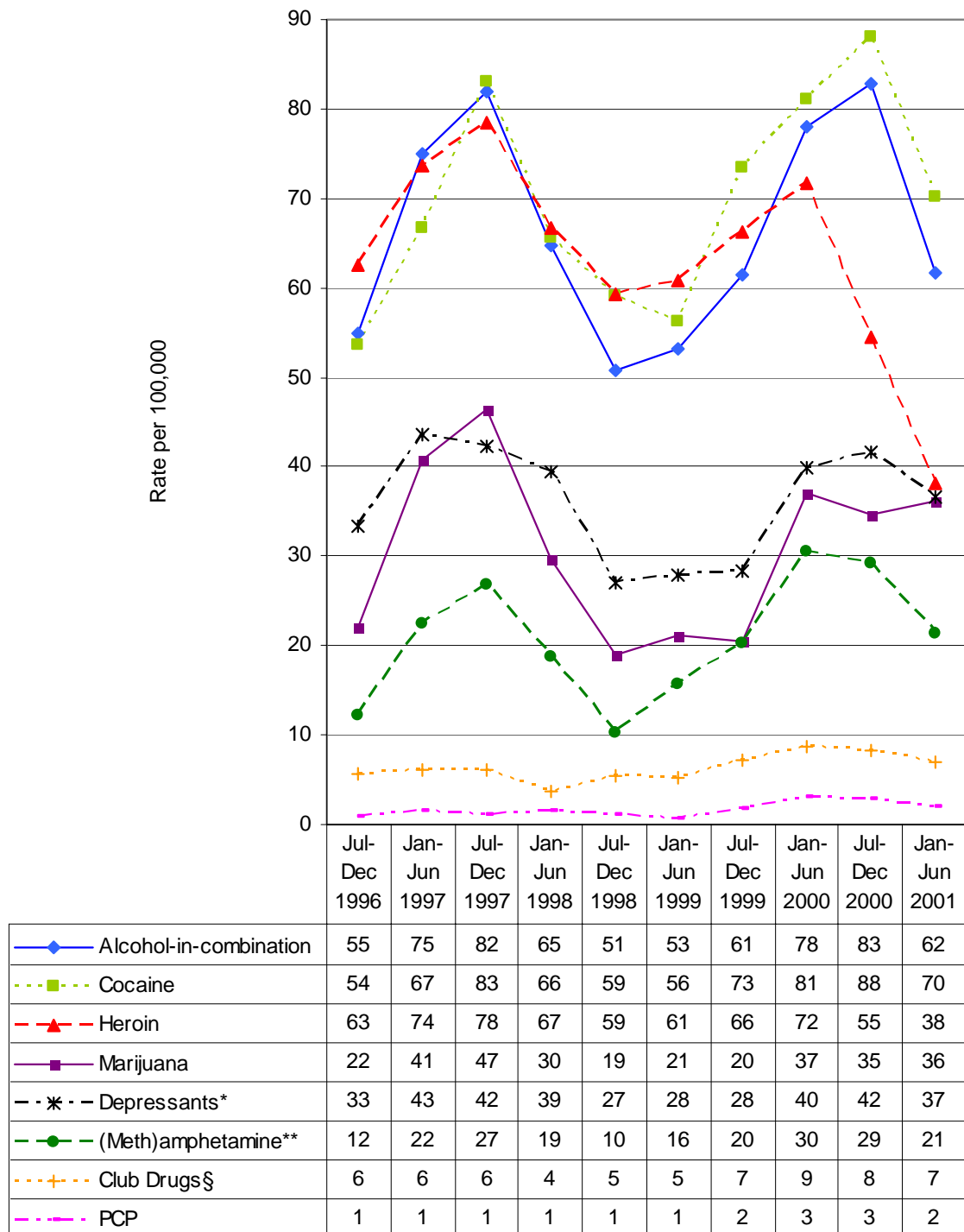
In contrast, the prevalence of HIV infection among male IDU who have the dual risk of same sex encounters is estimated at 47 percent for MSM/IDU who primarily inject methamphetamine and 14 percent for MSM/IDU who primarily inject other drugs. This latter rate is comparable to the HIV prevalence estimate among all MSM in the Seattle area.

Injection drug use is a relatively more common route of HIV transmission for persons of color, not including Asians, in King County compared to whites and Asian/Pacific Islanders. Injection drug use (including MSM/IDU) accounts for 41 percent of reported AIDS cases among American Indians/Alaskan Natives, 25 percent among Blacks, 17 percent among Hispanics, 14 percent among Whites, and 7 percent among Asians/Pacific Islanders. Blinded unlinked HIV prevalence surveys conducted among drug users entering methadone treatment between 1988 and 1999 found the rate of infection among African-Americans and Hispanics to be 2-3 times higher than the rate for whites. The infection rate for American Indian and Alaska Native IDU was 5-6 times higher than that observed among whites. No positive cases were found among Asian or Pacific Islander IDU who entered treatment during this period.

Although HIV prevalence among IDU in King County is relatively low, a high proportion of this population shows evidence of previous exposure to other blood-borne viruses. Epidemiologic studies conducted among over 4,000 IDU by Public Health's HIV/AIDS Epidemiology Program since 1994 reveal that 85 percent of King County IDU may be infected with hepatitis C (HCV) and 70 percent show markers of prior infection with hepatitis B (HBV). Recent incidence studies further indicate that 21 percent of non-infected Seattle-area IDUs acquire HCV each year and 10 percent of IDU who have not had hepatitis B acquire HBV. HIV incidence rate among IDU in these studies was estimated to be less than 0.5 percent per year. High prevalence and alarming transmission rates for HBV and HCV suggest that injection risk behaviors persist creating potential for future spread of HIV among IDU in King County.

*For inquiries concerning this report, please contact Caleb Banta-Green, MPH, MSW, Affiliation: Alcohol and Drug Abuse Institute, University of Washington, Address: 1107 NE 45th St, Suite 120; Seattle, WA 98105, Phone: (206) 685-3919, Fax: (206) 543-5473, E-mail: [calebbg@u.washington.edu](mailto:calebbg@u.washington.edu) Web: <http://adai.washington.edu> Alternate contact: Ellen Silverman, Ph.D., Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 612 Woodland Square Loop SE, Building C., Lacey, WA 98504-5330, Phone: (360) 407-1115, Fax: (360) 438-8087, E-Mail: [silveres@dshs.wa.gov](mailto:silveres@dshs.wa.gov).*

**Exhibit 1. Estimated Rates of ED Mentions per 100,000 Population by Drug, in King & Snohomish Counties, July 1996- July 2001**



\*Barbiturates, benzodiazepines, misc. anxiolytics, sedatives and hypnotics

\*\* Methamphetamine and amphetamines

§MDMA, LSD, Misc. hallucinogens, GHB, Ketamine, Rohypnol

Note- Data is not available on a semi-annual basis for other opiates e.g. oxycodone, hydrocodone, methadone etc.

Source: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (\*2/2002 update)

**Exhibit 2. Half-Yearly Trends in Alcohol/Drug Treatment Admissions: Seattle-King County,  
January 1999 - December 2001**

	Jan-Jun 1999	Jan-Jun 1999	Jul-Dec 1999	Jul-Dec 1999	Jan-Jun 2000	Jan-Jun 2000	Jul-Dec 2000	Jul-Dec 2000	Jan-Jun 2001	Jan-Jun 2001	Jul-Dec 2001	Jul-Dec 2001
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total Admissions</b>	4326	100.0	5382	100.0	5475	100.0	4986	100.0	4738	100.0	4208	100.0
<b>Primary Substance*</b>												
Alcohol**	1910	44.2	2331	43.3	2130	38.9	1935	38.8	1951	41.2	1745	41.5
(Meth)amphetamine	240	5.6	299	5.6	369	6.7	422	8.5	425	9.0	422	10.0
Cocaine	583	13.5	752	14.0	731	13.4	666	13.4	649	13.7	501	11.9
Hallucinogens	8	0.2	9	0.2	18	0.3	13	0.3	14	0.3	9	0.2
Heroin	732	16.9	956	17.8	1032	18.9	929	18.6	636	13.4	606	14.4
Marijuana	763	17.6	958	17.8	1119	20.4	948	19.0	986	20.8	819	19.5
Other Opiates & Synthetics	43	1.0	40	0.7	36	0.7	40	0.8	41	0.9	54	1.3
Other	47	1.1	37	0.7	40	0.8	33	0.7	36	0.7	52	1.2
<b>Route of Administration<sup>§</sup></b>	#	%	#	%	#	%	#	%	#	%	#	%
<b>Heroin</b>												
Inhalation	2	0.7	5	1.3	3	0.7	0	0	4	1.2	1	0.3
Injection	247	89.8	332	89.3	418	91.1	462	93.7	323	92.6	392	96.1
Intranasal	15	5.5	13	3.5	20	4.4	10	2.0	14	4.0	7	1.7
Oral	3	1.1	5	1.3	4	0.9	3	0.6	1	0.3	1	0.3
Smoking	8	2.9	17	4.6	14	3.1	17	3.5	6	1.7	6	1.5
Other/ Not Collected	0	0.0	0	0.0	0	0.0	1	0.2	1	0.3	1	0.3
Totals	275	100.0	372	100.0	459	100.0	493	100.0	349	100.0	408	100.0
<b>Cocaine</b>												
Inhalation	18	3.1	13	1.9	23	2.8	12	1.5	9	1.2	16	2.2
Injection	129	21.9	181	26.1	193	23.8	206	25.2	184	23.5	173	23.2
Intranasal	90	15.3	87	12.5	143	17.6	126	15.4	136	17.4	124	16.6
Oral	4	0.7	9	1.3	8	1.0	2	0.3	3	0.4	10	1.3
Smoking	347	58.8	403	58.1	442	54.4	470	57.5	450	57.6	413	55.4
Other/ Not Collected	2	0.3	1	0.1	3	0.4	1	0.1	0	0.0	9	1.2
Totals	590	100.0	694	100.0	812	100.0	817	100.0	782	100.0	745	100.0
<b>Methamphetamine</b>												
Inhalation	2	1.1	4	1.8	8	3.0	2	0.6	4	1.2	11	3.6
Injection	59	31.9	64	29.0	67	25.5	81	24.7	86	25.1	66	21.6
Intranasal	49	26.5	61	27.6	79	30.0	70	21.3	91	26.5	66	21.6
Oral	17	9.2	24	10.9	32	12.2	53	16.2	31	9.0	21	6.9
Smoking	57	30.8	68	30.8	76	28.9	120	36.6	131	38.2	138	45.3
Other/Not Collected	1	0.5	0	0.0	1	0.4	2	0.6	0	0.0	3	1.0
Totals	185	100.0	221	100.0	263	100.0	328	100.0	343	100.0	305	100.0

\* Primary substances includes duplicated admissions to treatment

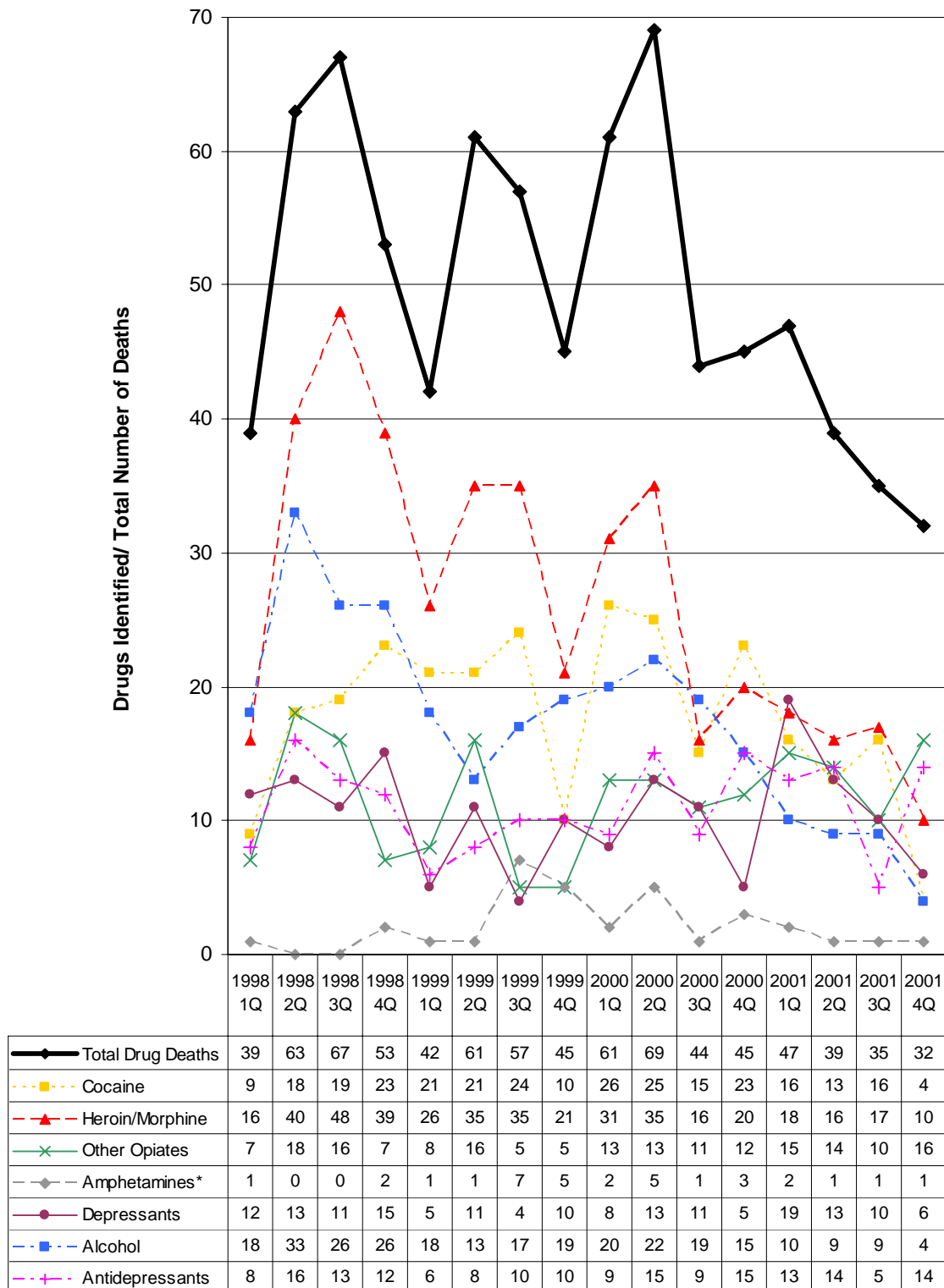
\*\* Alcohol includes alcohol alone and in combination with other drugs

§ Route of administration is for primary and secondary drugs and is not duplicated

Counts for the first half of 2001 are preliminary because of delays in data entry.

Source: Washington State TARGET data system—Structured Ad Hoc Reporting System

**Exhibit 3. Quarterly Number of Identified Drugs in Drug-Caused Deaths in Seattle-King County: January 1, 1998–December 31, 2001**



More than one drug may be identified per individual drug overdose death.  
 Table excludes poison-related deaths.  
 \*The amphetamines identification category includes methamphetamine.  
 Source: King County Medical Examiner

**Exhibit 4: Rate of Heroin-Involved Deaths per 100,000 Population in Seattle-King County 1989–2001**

1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
3.6	3.3	2.7	3.7	5.3	5.7	8.2	8.2	6.7	8.8	7.0	5.7	3.5

\*Note that rates from 2000 onward are calculated using the 2000 census population, prior years are calculated using the 1990 census, except for 1989.

**Exhibit 5. Demographic Characteristics of Reported AIDS Cases in Seattle-King County, other Washington Counties, WA State, and the U.S: Cumulative Through December 31, 2001<sup>1</sup>**

<b>Case Numbers and Deaths</b>	<b>King County</b>		<b>Other WA Counties</b>		<b>Washington State</b>		<b>United States**</b>	
Cumulative AIDS Cases	6,407		3,518		9,925		793,026	
Cumulative Deaths	3,671		1,854		5,525		457,667	
# currently living w AIDS	2,736		1,664		4,400		335,359	
<b>Case Demographics (reported 1/1999 - 12/2001)</b>	<b>Number</b>	<b>Pct.</b>	<b>Number</b>	<b>Pct.</b>	<b>Number</b>	<b>Pct.</b>	<b>Number</b>	<b>Pct.</b>
Gender:								
Male	642	89%	469	84%	1,111	87%	96,484	76%
Female	83	11%	89	16%	172	13%	31,185	24%
Age:								
<13	0	0%	1	0%	1	0%	714	1%
13-19	2	0%	5	1%	7	1%	917	1%
20-29	104	14%	74	13%	178	14%	16,338	13%
30-39	330	46%	223	40%	553	43%	52,630	41%
40-49	220	30%	164	29%	384	30%	39,452	31%
50-59	58	8%	66	12%	124	10%	13,140	10%
60+	11	2%	25	4%	36	3%	4,478	4%
Race/Ethnicity:								
White	475	66%	385	69%	860	67%	40,522	32%
Black	144	20%	70	13%	214	17%	60,740	48%
Hispanic	81	11%	65	12%	146	11%	24,689	19%
Asian	13	2%	12	2%	25	2%	1,134	1%
Native American	12	2%	18	3%	30	2%	584	0%
Unknown	0	0%	8	1%	8	1%	0	0%
Exposure Category:								
Male-male sex	465	64%	261	47%	726	57%	44,005	34%
Injecting drug user	50	7%	99	18%	149	12%	29,083	23%
IDU & male-male sex	59	8%	38	7%	97	8%	7,973	6%
Heterosexual contact	76	10%	62	11%	138	11%	23,139	18%
Hemophilia	3	0%	3	1%	6	0%	456	0%
Transfusion	3	0%	4	1%	7	1%	590	0%
Mother at risk/has AIDS	0	0%	1	0%	1	0%	695	1%
Undetermined/other	69	10%	90	16%	159	12%	21,728	17%
Total Cases	725	100%	558	100%	1,283	100%	127,669	100%

\* These cases were reported to Public Health - Seattle & King County or the Washington Department of Health between January 1999 and December 2001. Because of delays in reporting, these cases are not identical with all cases diagnosed during that time period.

\*\* Cases reported to CDC between 7/1/98 and 6/30/2001

Sources: Washington State Department of Health and Centers for Disease Control and Prevention

**Exhibit 6: HIV not AIDS Case Reports reported 9/1/1999 through 12/31/2001\***

<b>Case Numbers and Deaths</b>	<b>King County</b>		<b>Other WA Counties</b>		<b>Washington State</b>	
Number currently living with HIV	1,930		929		2,859	
<b>Case Demographics</b>	<b>Number</b>	<b>Pct</b>	<b>Number</b>	<b>Pct</b>	<b>Number</b>	<b>Pct</b>
Gender:						
Male	1404	88%	503	64%	1,907	80%
Female	192	12%	185	23%	377	16%
Age:						
<13	9	1%	7	1%	16	1%
13-19	44	3%	32	4%	76	3%
20-29	528	33%	283	36%	811	34%
30-39	699	44%	277	35%	976	41%
40-49	246	15%	147	19%	393	16%
50-59	65	4%	37	5%	102	4%
60+	5	0%	5	1%	10	0%
Race/Ethnicity:						
White	1158	73%	584	74%	1,742	73%
Black	253	16%	90	11%	343	14%
Hispanic	115	7%	66	8%	181	8%
Asian	37	2%	20	3%	57	2%
Native American	24	2%	14	2%	38	2%
Unknown	9	1%	14	2%	23	1%
Exposure Category:						
Male-male sex	1126	71%	342	43%	1,468	62%
Injecting drug user	103	6%	137	17%	240	10%
IDU & male-male sex	103	6%	73	9%	176	7%
Heterosexual contact	103	6%	122	15%	225	9%
Hemophilia	6	0%	1	0%	7	0%
Transfusion	6	0%	5	1%	11	0%
Mother at risk/has AIDS	7	0%	7	1%	14	1%
Undetermined/other	142	9%	101	13%	243	10%
Total Cases (last 3 years)	1596	100%	788	100%	2,384	100%

\* These cases were reported to Public Health - Seattle & King County or the Washington Department of Health between September 1999 and December 2001. Because HIV infection reporting was first implemented in Washington in September 1999, many cases reported during this period were actually diagnosed years before .  
U.S. HIV data is not currently available in a format consistent with AIDS data.